

CLAIMS:

1. A system for increasing the brightness of a portion of a video signal (VS), the system comprising:

a signal-generating unit (PC) for supplying the video signal (VS) and control information (CI), and

5 an LCD unit (MON) having an LCD device (LP) for displaying the video signal (VS), and a lighting unit (LU) for increasing an amount of light illuminating the LCD device (LP) in response to the control information (CI),

the system further comprising a video amplitude-modifying means (AM1;AM2;CU) for decreasing an amplitude of the video signal (VS) outside the portion in response to the control information (CI).

2. A system as claimed in claim 1, wherein:

the LCD unit (MON) comprises a video-processing circuit (VP) for receiving an input video signal (VS) to supply a display video signal (VS2) to the LCD device (LP),

15 the signal-generating unit (PC) comprising:

a video adapter (VA) for supplying the input video signal (VS), and

a control unit (BCU) for generating the control information (CI).

3. A system as claimed in claim 2, wherein the amplitude-modifying means

20 (AM1;AM2) is adapted to decrease the amplitude of the display video signal (VS2) outside the portion so that the light output and colorimetry of the display video signal (VS2) not belonging to the portion is kept substantially constant.

4. A system as claimed in claim 3, wherein the amplitude-modifying means

25 (AM1;AM2) is adapted to decrease the amplitude of the display video signal (VS2) outside the portion so that also a color of the display video signal (VS2) not belonging to the portion is kept substantially constant.

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5. A system as claimed in claim 2, wherein the amplitude-modifying means (AM1) comprise a controllable amplifier for receiving the input video signal to control an amplitude of the input video signal (VS) in response to the control information (CI).

6. A system as claimed in claim 2, wherein the amplitude-modifying means (AM1) comprise a memory in which a look-up table is stored for receiving the input video signal to control an amplitude of the input video signal (VS) in response to the control information (CI).

7. A system as claimed in claim 2, wherein the video adapter (VA) comprises the amplitude-modifying means (AM2) for receiving video data (VD) from the video adapter (VA) to control an amplitude of the video data (VD) in response to the control information (CI) to obtain the input video signal (VS3) having an amplitude for a part not corresponding to the portion which is smaller than an amplitude of a part corresponding to the portion.

8. A system as claimed in claim 2, wherein the video adapter (VA) comprises a video memory (VM), and the control unit (BCU) comprises a calculating unit (CU) suitably programmed to write adapted video data (VDI) into the video memory (VM) to obtain the input video signal (VS3) having an amplitude for a part not corresponding to the portion which is smaller than an amplitude of a part corresponding to the portion.

9. A system as claimed in claim 2, wherein the signal-generating unit (PC) comprises an input device (ID) for receiving user input (UI), the control unit (BCU) being suitably programmed to generate the control information (CI) in response to the user input (UI) indicating a predetermined amount by which the light output of the lighting unit (LU) has to be increased.

10. A system as claimed in claim 2, wherein the signal-generating unit (PC) comprises an encoder (EN) for supplying the control information (CI) as a coded message (CM), and the LCD unit (MON) comprises a decoder (DE) for decoding the message (CM) to obtain a control signal (LCS) supplied to the lighting unit (LU) to increase its light output.

11. A system as claimed in claim 8, wherein the encoder (EN) comprises a video encoder for coding the coded message in the video or synchronizing signal.

12. A system as claimed in claim 9, wherein the coded message (CM) indicates an amount by which the light output of the lighting unit (LU) has to be increased.

5 13. A computer (PC) comprising:
an interface (I1) for connecting an LCD unit (MON),
a video adapter (VA) for supplying a video signal (VS) to the interface, and
a brightness control unit (BCU) for supplying control information (CI) to the
interface, the control information (CI) indicating to a lighting unit (LU) of the LCD unit
10 (MON) that an increase of its light output is requested.

14. A computer as claimed in claim 13, wherein the computer (PC) further
comprises a video amplitude-modifying means (AM2;CU) for decreasing an amplitude of the
video signal (VS) outside a part of the video signal (VS) where the brightness has to be
15 increased.

15. An LCD monitor (MON) comprising
an interface (I2) for receiving a video signal (VS) and control information (CI)
from a computer (PC),
20 an LCD device (LP) for displaying the video signal (VS),
a lighting unit (LU) for receiving the control information (CI) to increase an
amount of light illuminating the LCD device (LP), and
a video amplitude-modifying means (AM1) for decreasing an amplitude of the
video signal (VS) outside a part of the video signal where the brightness has to be increased
25 as indicated by the control information (CI).

16. A method of increasing the brightness of a portion of a video signal (VS), the
method comprising the steps of
supplying (PC) the video signal (VS) and control information (CI), and
30 displaying (MON) the video signal (VS) on an LCD device (LP), and
increasing (LU) an amount of light illuminating the LCD device (LP) in response to the
control information (CI),
decreasing (AM1;AM2;CU) an amplitude of the video signal (VS) outside the
portion in response to the control information (CI).